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PLANNING FOR PRODUCT INFORMATION SERVICE IN HMT.

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The need for product information service in an industrial firm is mentioned. A plan giving the objectives inputs, and procedures for product information service in HMT has been mentioned. The factors affecting the efficient functioning of product information systems are highlighted. Two types of product information service given at HMT are discussed. Suggests a systematic cost-benefit analysis of these studies.

0 INTRODUCTION

01 Industrial Informatics Centre

An Industrial Information System primarily aims at acquiring and disseminating information on technological, commercial and managerial activities. An information centre attached to an industrial firm generally aims to orient its information services to meet the immediate demands of the firm.

02 Information Service and Functional

Activities of an Industry

The variety of information dissemination services that a Technical Information Centre can give as a supporting activity to the different functional activities of an industrial concern may be summarised as follows:

Information Needs in an Industry

SN	Information Needs in Functional Industry	Type of Information/ Services Needed
1	Policy Planning	(a) Digests on various aspects of corporate planning (b) Write-ups (c) Technical briefs
2	Project Planning	(a) Information for feasibility study (b) Information for Identifying critical problems and resolving them (c) Analysis reports
	Product Development and Related Research and Development effort	(a) Trend report (b) State-of-the-art (c) Reviews (d) Background reports (e) Information on new developments in products and process technology (f) Product news giving a comparative account of the products of the competitors (g) Reporting contemporary research in progress (h) Abstract of patents reported in India and abroad, relating to machine tools and production technology (i) Information on cost reduction techniques
4	Finance	(a) Information on all aspects of finance like source, expenditure and control (b) Information on costing and evaluation methods (c) Management accounting (d) Information on improving cost efficiency

SIT	Functional Industry	Types of Information/ Services Needed
		(e) Information on product pricing
5	Marketing	(a) Information on production statistics (b) Information on export statistics (c) Information on import statistics (d) Information for the compilation of market surveys (e) Information for preparing sales forecast (f) Information required for sales promotion
6	Organisation and Personnel Development	(a) Information on techniques enabling to harness the creative elements of the personnel (b) Information related to manpower planning (c) Information on various topics of management techniques

03 Scope of Paper

This paper attempts to present the various factors that are taken for consideration in providing the two variety of services in respect of product planning namely, (1) Product News, (2) Product Information Brochure in the Technical Information Centre of the Hindustan Machine Tools (= HMT) Complex.

1 OBJECTIVES

The objective of Product Information Service at HMT is to meet the variety of demands of the design and development units of the HMT. The design engineers usually combine scientific and technical knowledge with a keen sense of function and utility. The various stages of the design process and the types of information needed at each stage is indicated in the following table

SN	Design Process	Types of Documents/information Required
1	Study of customers' requirements and establishing the basic feature of the design	Trade literature and relevant trade data of manufacturers of products, both at home and abroad
2	Experimental work and mockups	Research publications on the design of machine tools
3	Estimating production costs	Trade catalogues, working instructions and price list of materials
4	Manufacture and testing of proto-type or pilot model	Test and inspection reports of proto-types in the field of machine tools
5	Designing for production	Trade literature on production engineering and related fields Standards and specifications
6	Preparation of detailed drawings, sub-assemblies, and general arrangements, specifications, part and material lists	Parallel data available on the concerned product family

SN	Design Process	Types of Documents/Information Required
7	Approval and release of design data and schedules to planning departments production control and jig and tool drawing office	Literature on planning, jigs fixtures and on production control
8	Planning for production	Available data or. the preparation of operation layouts and other steps involved in actual production

2 INPUTS NEEDED

Product Information Service can be done efficiently only if there is a comprehensive collection of trade catalogues, product directory, product advertisement brochures, standards and specifications, and design sheets, and in addition, adequate number of documentalists who are familiar with the firm's products and needs of the designers. It should also be provided with facilities such as reprographic service and if possible, computer facilities. The TIC of HMT has been fortunate enough to have these facilities.

3 PROCEDURE

The system of procedure for organising a Product Information Service adopted in TIC at HMT is as follows :

- 1 To identify and procure various sources of information on products such as Trade Catalogues, Market Reports, Design Characteristics, Consumer Surveys, Firm Directories, Retailer's Reports.

2 To Identify and record the requirements of the designers of HMT.

3 To classify and catalogue the different sources of information so as to facilitate retrieval on request.

4 To match the information contained in the acquired document with the requirements of the designers of the firm.

5 To compile and produce publications such as Product News or Product Information Brochure for wide dissemination,

- 6 To continuously keep a feedback system between the users requirements and the sources of information available for use.

These procedural operations form an integral part of the overall activities of the TIC in HMT,

4 FACTORS NEEDING ATTENTION

The efficient functioning of Product Information Service may be hampered due to the following factors:

1 Unsystematic acquisition of sources of information on products and product development;

2 Inability to assess the reliability of information contained in different sources;

3 Imprecision in the communication between the designers and documentalists;

4. Incapacity of the documentation techniques adopted for product information service, to meet the growing demands; and

5 lack of sufficient encouragement by the management in the form of men, money, and materials.

5 ENVIRONMENTAL FACTORS

The causal factors for the various strains mentioned in Sec 4 are due to fluid conditions that exist in a manufacturing concern. The competitive market demands innovative product development at a faster pace. Moreover, the personnel in the design department may change periodically due to a variety of reasons or causes. Therefore, unless the communication between the documentalists and designers is efficient and continuous, the Product Information Service cannot be in communion with the designer's requirements. The advantage of the TIC at HMT is that it forms an integral part of the design engineering department. This provides it with a continuous facility to meet the demands of the changing environments,

6 PRODUCT INFORMATION AT HMT

The Product Information Services at the Technical Information Centre cover most of the information needs of the designers working on specific projects. Two types of publications — namely, Product News and Production Information Brochure — are brought out regularly.

61 Product News

After carefully studying and investigating the information needs of the designers, the TIC planned to bring out a service known as 'Product News'. The Product News gives a comparative account of the salient features of HMT machines and those of its competitors. The following is a portion of the Product News Service brought out on 30 January 1971.

Product News

1 GEAEED-HEAD LATHE

Manufacturer: American Edelstal, Inc.
 1 Atwood Avenue, Tenafly,
 NJ 07670,

Price \$1995

Technical features Flame hardened scientific bilevel bed. Enclosed 12 speed geared spindle drive and GE Motor. Dial selection quick change box with 72 metric and inch threads, 72 feeds

Timkin tapered roller bearings.
 Feed rod safety clutch.
 Carriage interlock mechanism,
 Designed for the sweeping range of modern metal work
 Increases accuracy and stability while bringing down the cost of its manufacturer

(Sources Machine and Tool Blue Book, October 1970
 Page 64),

2 REGAL LATHE

Manufacturer .. Le Blond, Cincinnati, Ohio, US.

Base price .. \$6,580,

Technical features 3 slides for drilling, turning, boring, facing, reaming, "O" ring and face grooves

Automatic programming - no cams, no tapes.
 Completely hydraulic slides and chuck
 3 models: 8", 10" or 12"

(Source; Machine and Tool Blue Book, May 1970,
 Page 215).

62 Product Information Brochure

It was observed, after carefully going through the information collecting habits of the designers, that the designers referred to trade literature of various manufacturers with a view to compare the technical features of the products of the competitors at the various stages of design process. Further, investigations revealed- that comparative account on the various attributes would be helpful to the designers in the stages of product development. Therefore, in order to save the time of decision makers and design engineers, the- TIC instituted the Product Information Brochure service. It ventures to give all available data on different salient features of a product culled out from different sources of information presented for comparative studies. The example in Sec 91 presents a portion of the Product Information Brochure prepared to give comparative specifications, of Numerical Control Lathe. (Sec Page 345).

7 APPRECIATION OP THE SERVICE

The two types of product information leaflets have generated a good amount of awareness among the design engineers and managers of our industrial complex, Encouraged by the appreciative response, the TIC planned to make these two services as an integral part of its day-to-day work. The Product news is brought out periodically. But the Product information brochures were made largely on demand or in anticipation of demand from the designers. So far, 15 Product information brochures have been produced,

Product Information Service in HMT

In an industrial complex, the potentialities for a variety of Product Information Services is endless. But, to make it effective, we must have a planned procedure. Without developing sufficient resources -- document resources as well as manpower resources -- needed for those services, we should not venture into it. This paper has only touched upon the factors that are to be considered in instituting Product Information Services. A detailed work study and cost-benefit analysis may demonstrate the value of Product Information Services.

91 Comparative Specifications of N/C Lathes

Specifications	Make	MONARCH MACHINE TOOL CO, OHIO				MAX MULLEH - HANNOEVIR			
	Type	Vertical Led Bar Machine				~NC TURNING - MACHINES			
	Model	220 N/C B	220 N/C B	110 N/C B	110: N/C B	MDW 20	MDW 21	MDW 22	MDW 23
^ Axes controlled	Nos	2	4			.2	2	2	-- 2
Straight cut	Yes/No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Contouring	Yes/No	Yes	Yes	Yes	Opt	Yes	Yes	Yes	Yes
0 Threading 0	Yes/No	No"	No	No	No	Yes	Yes	Yes	Yes